EXPLORATION LICENCE 4638

GRACE CREEK N.T.

ANNUAL REPORT FOR YEAR ENDING 3RD OCTOBER 1985

by

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for

MINERAL HORIZONS N.L.

on behalf of

MINSCOPE PTY. LTD.

NORTHERN TERRITORY GEOLOGICAL SURVEY

CR86/094
SUMMARY

This was the first year of tenure for the Exploration Licence.

Soon after the licence was granted, an Aboriginal Land Claim was lodged over Eva Valley Pastoral Lease which includes the Licence area. Towards the end of the year of tenure, trading of tin ceased on the London Metal Exchange. These two factors considerably dampened enthusiasm for exploration in the area.

A Northern Territory Company, Mineral Horizons N.L. took up an option over the Licence area during the year.

This Company has assessed the area and carried out some sampling and panning which confirms the work of previous explorers.

Future work should be directed towards establishing the volume of thick alluvium in the area and establishing its tin content. A closer assessment of outcropping quartz and quartz tourmaline veins should also be made.
INTRODUCTION

Exploration Licence 4638 was granted to Minscope Pty Ltd on the 4th October 1984.

In February 1985, a Land Claim known as the Eva Valley Pastoral Lease Land Claim was lodged with the Northern Land Council. This Land Claim covers and surrounds the Exploration Licence and its existence throws some doubt as to whether any mining tenements which would be applied for following a successful exploration programme, would be granted.

Consequently, Minscope Pty Ltd has applied for a variation of expenditure commitments. Another reason for applying for this variation of expenditure commitments is that more recently, tin prices have dropped with the cessation of trading in tin on the London Metal Exchange.

During the year an agreement was entered into with Mineral Horizons N.L., who carried out exploration work on the exploration licence.
LOCATION AND ACCESS

Exploration Licence 4638 covers an area of some 39 square kilometres and is situated within the boundaries of (1) the Eva Valley 1:100 000 sheet and (2) the David 1:50 000 sheet. These sheets are part of the Katherine 1:250 000 sheet.

The exploration licence is approximately 75 kilometres north east of the township of Katherine.

Access from Darwin is via the sealed Stuart Highway through Katherine to the Beswick and Maranboy Police Station turnout which heads westwards from the Stuart Highway. This road is also sealed. A few kilometres before reaching the Maranboy Police Station, a well formed gravel road leads north to Eva Valley Homestead, with Eva Valley airstrip just to the north. From here a very rough track, suitable for four wheel drive vehicles only, heads north north east for twenty kilometres to the exploration licence area.
HISTORY OF PROSPECT

In 1982, Mobil Exploration broadly defined a zone of anomalous tin values in alluvium with a stated potential in the order of 2 000 000 cubic metres with a grade of slightly less than one kg of tin per cubic metre.

In 1983, CSR evaluated the alluvial material and downgraded the prospect to 400 000 cubic metres. This conclusion was based on results of testing only a very few samples (three soil and six stream sediment samples).

As yet no data is available on the thickness of the alluvium over the majority of the area, so estimations of the amount of material present cannot be considered to be meaningful at this stage.

It is considered that the next stage in the exploration of this area should be to determine the order of magnitude of the amount of alluvial material present and at the same time, to obtain good estimates of the grade of the tin present where sampled.
GEOLOGY

The Grace Creek Granite, which is basically a granophyric granite or microgranite with associated volcanics underlies the whole area of the Exploration Licence and a good deal of the surrounding area. Within the area of the licence, there are quartz and quartz tourmaline veins which intrude the granite. At least one quartz tourmaline vein contains cassiterite.

The quartz veins trend in a north-south direction in the southern part of the licence area, whereas the quartz tourmaline and quartz tourmaline cassiterite veins trend north-westerly in the central and north western parts of the area.

Scintillometer readings indicate that the granite in the area containing the quartz tourmaline veins most likely contains considerably more potassium feldspar than other parts of the Grace Creek Granite.
EXPLORATION RESULTS

Exploration for the year ended 3rd of October 1985 in the Exploration Licence area was confined to surface sampling and panning of the resultant samples. In all cases the material sampled was alluvium from shallow levels.

This work was carried out by C.D. Ronan, an experienced prospector, and by G. Hamilton.

Early rain in September made conditions on the Exploration Licence quite wet, and because of the low lying nature of much of the area, it was inaccessible even to four wheel drive vehicles. Consequently, it would have been very difficult to bring in heavier machinery to trench the alluvium in the area at deeper levels as it had been hoped to do.

A plan showing the area and the locations from which the samples were taken is shown on a map accompanying this report. It should be noted that each sample as shown is actually a composite sample taken from 3 to 5 localities within a 50 metre radius from shallow alluvium overlying bedrock. Ilmenite was found in all samples but the only samples found to contain cassiterite were from near the quartz tourmaline cassiterite vein discovered previously. Estimates of grade for the samples containing cassiterite is about 1.5 kgs per cubic metre.

This may indicate that only one cassiterite bearing vein may crop out in the area. However, this is not necessarily so, as the sampling density so far achieved is not sufficient to arrive at such a conclusion. Samples from thicker alluvium, of which there is a lot in the area also need to be tested to determine whether a viable alluvial deposit is present.
CONCLUSIONS

The work carried out during the year added to the mineral potential knowledge of the area, even if only in a negative sense.

However, this has not seriously lowered the economic potential of the area, as the deeper alluvials are the major target, as they have a much higher volume potential than the shallow alluvials tested during the past year.

Depending on the trend of tin prices and the likely outcome of the current Aboriginal Land Claim over the area, a decision could be made to carry out a programme to test the thicker alluvial material for likely volume and grade during the coming dry season. Access to the area for larger machinery should be possible in June, though this would depend on the rain pattern over the months of the wet season months.
EXPENDITURE

The following expenditures relate to the Exploration Licence for the year ending 3rd October 1985.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Salaries, Wages</td>
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<tr>
<td>Maps Air Photos Reports</td>
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<td>Geological Supplies</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$6,027.00</strong></td>
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</tbody>
</table>
Areas sampled for tin during 1985 marked with cross

× Composite sample taken from 3 to 5 locations within a 50 metre radius from centre of cross. All samples contained ilmenite and no cassiterite except the two samples closest to P.D.H. (Percussion Drill Hole), which contained about 1.5 kgs/c.m. For further details, please see text.

SCALE : 1:50 000